Award Number:

W81XWH-15-1-0636

TITLE:

Effect of Diet on Gulf War Illness: A Pilot Study

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REPORT DATE: October 2016

TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Materiel Command Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for Public Release;

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# REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

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1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED		
October 2016 Annual		30 Sep 2015 - 29 Sep 2016		
		5a. CONTRACT NUMBER		
4. TITLE AND SUBTITLE		Ja. CONTRACT NOWIBER		
Effect of Diet on Culf Wer Illness: A	Dilat Study			
Effect of Diet on Gulf War Illness: A	A Pilot Study	5b. GRANT NUMBER		
		W81XWH-15-1-0636		
	5c. PROGRAM ELEMENT NUMBER			
6. AUTHOR(S)		5d. PROJECT NUMBER		
Ashak Tutaia, M.D.		5 TAOKANIMED		
Ashok Tuteja, M.D.		5e. TASK NUMBER		
		5f. WORK UNIT NUMBER		
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7. PERFORMING ORGANIZATION NAME(S) A	ND ADDRESS(ES)	8. PERFORMING ORGANIZATION REPORT NUMBER		
   Western Institute For Biomedical F	Research	NOWBER		
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Salt Lake City, UT 84148				
9. SPONSORING / MONITORING AGENCY NA	ME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)		
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U.S. Army Medical Research and Material Command				
Fort Detrick, Maryland 21702-5012	<b>Z</b>	11. SPONSOR/MONITOR'S REPORT		
		NUMBER(S)		
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### 12. DISTRIBUTION / AVAILABILITY STATEMENT

Approved for Public Release; Distribution Unlimited

13. SUPPLEMENTARY NOTES

## 14. ABSTRACT

The overall objective of the study is to determine the efficacy of a Low FODMAP (modified healthy) diet relative to a High FODMAP (typical healthy) diet in reducing the 1) Intestinal symptoms of Irritable Bowel Syndrome and 2) Non-intestinal symptoms (fatigue, joint pain, insomnia, general stiffness and headache) in Veterans with Gulf War Illness.

We will also determine if the change in gut flora is a mechanism for improvement in symptoms of IBS and GW illness while on the study.

We screened our first participant in September 2016. Overall we have screened 5 and enrolled 2 Gulf War Veterans so far. Our efforts are ongoing to recruit more Gulf War veterans

### 15. SUBJECT TERMS

Irritable bowel syndrome, FODMAP, Gulf War Illness, diarrhea, Diet

16. SECURITY CLASSIFICATION OF:		17. LIMITATION	18. 19a. NAME OF RESPONSIBLE PERSON NUMBER		
U		OF ABSTRACT	OF PAGES	USAMRMC	
a. REPORT U	b. ABSTRACT U	c. THIS PAGE U	UU	10	19b. TELEPHONE NUMBER (include area code)

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### Introduction:

New onset of gastroenteritis during deployment is a risk factor for the development of irritable bowel syndrome (IBS) after deployment. Gulf War (GW) Veterans with IBS are more likely to report fatigue, joint pains, general stiffness and headaches; symptoms that are indistinguishable from GW Illness. Diet is a major factor that influence gut bacteria along with gastroenteritis, travel, and stress factors which are relevant to GW Veterans. This suggests that foods as well as an alteration in intestinal microbiota are involved in the pathogenesis of IBS in GW Veterans.

The goal of this project is to compare a low FODMAP (modified healthy) diet to a high FODMAP (typical healthy) diet in Veterans with IBS and symptoms of GW illness. Both diets will be healthy.

### Body:

During the last on year the following goals were accomplished:

- Study was approved by the University of Utah, Institutional Review Board in July 2016.
- Study was approved by the Human Research Protection Office at the United States Army Medical Research and Materials command (USAMRMC), in August 2016.
- We have worked with our Dietician and planned menus for low FODMAP and high FODMAP diets.
- We have screened 5 Gulf War Veterans and have enrolled 2 from the beginning of the study. First patient was enrolled in September 2016.
- Stool banking has been set up at the VA Medical Center, Salt Lake City where the screened participants' samples have been banked.

Key	<b>Research Accom</b>	plishments
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• We have recruited 2 Gulf War Veterans and continue to make progress in recruiting more Veterans.

Reportable Outcomes......

# Conclusion:

Study is ongoing at a good pace as we planned. We continue our recruitment efforts to increase our study enrollment.

References......

Appendices	 	
Nil.		